Amendments to the Specification

Replace the paragraph on page 11, lines 32-35 with the following:

Figures [[13-1]] 13A (panels ~~A, B and C~~ a, b and c) and [[13-2]] 13B (panels ~~A, B and C~~ a, b and c) show immunohistochemical analysis of spleen sections from immunized mice treated with TACI-Fc or BCMA-Fc, and described in further detail in Example 5.

Replace the paragraphs spanning page 91, line 13 to page 92, line 18 with the following:

During the early part of an antigen-specific antibody response, B cells differentiate into antibody-forming cells (AFC). This takes place in extrafollicular areas of the spleen composed of periarteriolar lymphoid sheaths (PALS) [Gray, D., Immunology, 65:73 (1988); MacLennan, Ann. Rev. Immunol., 12:117 (1994)], where Ig class switching subsequently occurs. The PALS-associated regions were compared from spleens of NP_{23}-CgG-immunized mice treated for 10 days with control Ig, TACI-Fc, or BCMA-Fc, similar to as described above. Immunohistochemical analysis of the various spleen sections was then conducted. Spleen sections prepared 10 days after immunization and stained with FITC-conjugated anti-IgG1 are shown in Figure [[13-1]] 13A (Panel [[A]] a) and Figure [[13-2]] 13B (Panel [[A]] a). As expected, control mice displayed a large number of clustered AFC foci that stained intensely with anti-IgG1 and contained many immunoblast-like cells (~~Fig. 13-1, Panel A,~~ FIG.13A, Panel a left). In contrast, TACI-Fc treated mice showed only few, isolated, IgG1-positive cells, with no formation of AFC foci (~~Fig. 13-1, Panel A,~~ FIG.13A, Panel a, right). BCMA-Fc treated mice likewise showed only few, isolated, IgG1-positive cells, with no formation of AFC foci (~~Fig. 13-2, Panel A,~~ FIG.13B, Panel a). Thus, TALL-1/TACI and TALL-1/BCMA (and APRIL/TACI and APRIL/BCMA) interactions are important for the extrafollicular differentiation of B cells that precedes Ig class switching in splenic PALS-associated areas.

To study the potential role of TALL-1/TACI and TALL-1/BCMA interactions in antibody affinity maturation, the formation of germinal centers (GC) was examined in the spleens of NP_{23}-CgG-immunized mice at day 14. Spleen sections were prepared 14 days after immunization and stained with FITC-conjugated anti-PNA (green fluorescence) and

Texas Red-conjugaed anti-IgM (red fluorescence). As expected, splenic follicles from controls displayed intense staining with peanut agglutinin (PNA), a lectin that binds specifically to GC B cells (~~Fig. 13-1, Panel B~~ FIG.13A, Panel b, left). In sharp contrast, splenic follicles from TACI-Fc treated mice were devoid of GCs, and displayed only few, isolated, PNA-staining cells (~~Fig. 13-1, Panel B~~ FIG.13A, Panel b, right). Splenic follicles from the BCMA-Fc treated mice were also devoid of GCs, and displayed only few, isolated, PNA-staining cells (~~Fig. 13-2, Panel B~~ FIG.13B, Panel b).

Despite the lack of GCs, there were no abnormalities in splenic follicular architectures of TACI-Fc or BCMA-Fc treated mice, as judged by hematoxilyn and eosin staining of spleen sections at day 14 (~~Figure 13-1 – Panel C~~ FIG.13A, Panel c, left (Controls) and Panel [[C]] c, right (TACI-Fc treated); and ~~Figure 13-1 Panel C~~ FIG.13A, Panel c (BCMA-Fc treated). This suggests that in TACI-Fc or BCMA-Fc treated mice, some follicular B cells could differentiate into AFCs, but could not proceed to form GCs. Thus, TALL-1/TACI and TALL-1/BCMA interactions (as well as APRIL/TACI and APRIL/BCMA interactions) appear to be critical for proper GC formation.